

A NEW SPECIES OF PLESMONIUM (ARACEÆ) FROM INDOCHINA

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ABSTRACT: A new species of the previously monotypic genus *Plesmonium* Schott, *P. coudercii* Bogner, is described. It differs from *P. margaritiferrum* (Roxb.) Schott by the absence of sterile organs between the female and male flowers and by its truncate stamens.

RÉSUMÉ : Description d'une nouvelle espèce de *Plesmonium* Schott (genre jusqu'à présent monotypique), *P. coudercii* Bogner. Elle diffère de *P. margaritiferrum* (Roxb.) Schott par l'absence d'organes stériles entre les fleurs mâles et femelles et par des étamines tronquées.

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During the years between 1883 and 1885 Dr. Paul COUDERC collected a new aroid in Indochina and his herbarium specimens were given to the Muséum National d'Histoire Naturelle in Paris on the 20 December 1920. This material was not studied by GAGNEPAIN for his treatment of the *Araceæ* for the "Flore Générale de l'Indochine"; it had been kept together with other undetermined specimens at P.

Plesmonium coudercii Bogner, *sp. nov.*

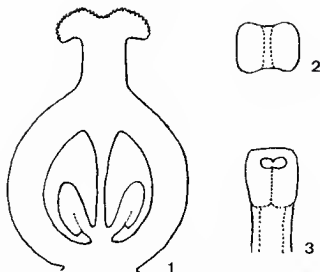
A P. margaritiferrum spadice sterilis organis inter flores femineos et masculos non instructo, staminibus apice truncatis differt.

TYPUS : *P. Coudere s.n.*, Cambodge, without exact locality, 1883-1885 (holo-, P).

Tuber elongate, more than 4 cm long (incomplete in the type specimen), 1.5-2.5 cm in diameter. Peduncle 25-40 cm long and 0.2-0.5 cm in diameter; cataphylls membranaceous, 5-10 cm long and 1-2 cm wide. Spathe 4.5-9 cm long, not or only very slightly constricted (one specimen of the type collection shows a slight constriction, the other two no constriction), lower part of the spathe involute and enclosing the female part of the spadix, upper part of the spathe expanded. Spadix 4-8 cm long and 0.5-1 cm in diameter, sessile, fertile to its apex, acute; female part 1-2 cm long, male part 2-6 cm long. Flowers unisexual, naked. Ovary globular, 2.5-3 mm in diameter, bilocular, each locule with one anatropous ovule fixed at the base of the inner wall; ovule with a long funiculus; style short, ca. 1 mm long and 1 mm thick; stigma disc-like, papillose, 1.5-2 mm in diameter, slightly



Pl. 1. — *Plesmonium coudercii* Bogner : two inflorescences of the type collection (*Couderc s.n.*, P).



Pl. 2. — *Plesmonium coudercii* Bogner : 1, longitudinal section of the pistil, showing the bifoliate ovary; 2, stamen from above; 3, stamen in side view; all $\times 16$. (Couderc s.n., P).

depressed in the center. Stamens truncate, ca. 1,5 mm long and ca. 1 mm in diameter, the two thecae in the upper half; theca ellipsoid-oblong, ca. 0,8 mm long and ca. 0,6 mm wide, opening in a horizontal broad slit just below of the top of the stamen.

The inflorescence appears before the leaf, which is unknown. There is no grouping of the stamens and the male flower is considered to consist of one stamen only.

It is somewhat difficult to place this new species in the known genera of *Araceæ*. It shows many similarities with *Thomsonia* Wall., *Plesmonium* Schott and *Pseudodracontium* N. E. Br., all closely related to *Amorphophallus* Bl. ex Decne., which differs from them by its entirely naked appendix (not covered with flowers, either fertile or sterile). *Thomsonia* and *Pseudodracontium* both have the appendix covered with sterile flowers (the sterile flowers contiguous with the fertile male flowers in *Thomsonia* and separated from the male flowers by a naked area in *Pseudodracontium*). *Plesmonium* has the upper part of the spadix entirely covered with fertile male flowers. These generic distinctions were discussed earlier (BOGNER, 1976, p. 18).

This new species is most similar to *Plesmonium* in that it has the upper part of the spadix entirely covered with fertile male flowers. The only previously known species, *P. margaritifera* (Roxb.) Schott, has large, pearl-like, sterile organs (*margaritifera* = pearl-bearing) between

the male and female parts of the spadix. These are lacking in this new species. The staminal structure in the new species is most similar to *Plesmonium* although the stamens are truncate in it and they are pointed in *P. margaritifera*.

The female flowers of all these genera are very similar, being uni-, bi- or trilocular with a single anatropous ovule in each locule. Only *Pseudodracontium* is regularly unilocular. *Plesmonium* is bi- to trilocular.

Unfortunately *Plesmonium coudercii* is incompletely known and it was collected only once. No further collection of this species has been found and it must be considered as very rare. Today it is impossible to collect in Cambodia. Therefore I am describing this certainly new species, of which the leaf and the fruits are still unknown.

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LITERATURE

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